	A	T.A. (1)
Notice of Allowability	Application No.	Applicant(s)
	09/894,400	CHO, YOUNG-KYUN
	Examiner	Art Unit
	Eva Yi Zheng	2634
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to 2/2/05.		
2. The allowed claim(s) is/are 1,3-9,11-13,15-17,19 and 20.		
3. The drawings filed on 28 June 2001 are accepted by the Examiner.		
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c)  None of the: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* Certified copies not received:</li> </ul> Applicant has THREE MONTHS EROM THE "MAILING DATE" of this communication to file a reply complying with the requirements.		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawing to 37 CFR 1.121(	ngs in the front (not the back) of d)
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	6. ☐ Interview Summary Paper No./Mail Da 08), 7. ☐ Examiner's Amendr	

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## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 1, 3-9, 11-13, 15-17 and 19-20 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

None of the prior art teaches or suggests a clock signal recovery circuit in a USB comprising: a phase detector for detecting a phase difference between data received from a USB transmitter and a recovery clock signal and generating a first control signal indicative of a detected phase difference; a bidirectional shift register for outputting a second control signal in response to the first control signal; a multiphase clock signal generator for processing a receiver clock signal of the USB receiver, wherein the receiver clock signal is the same as a transmitter clock signal of the USB transmitter, generate a plurality of phase clock signals each having the same frequency as the receiver clock signal and a different phase offset from the phase of the receiver clock signal; and a phase selector responsive to the second control signal for selecting one of the plurality of phase clock signals and outputting the selected phase clock signal as a recovery clock signal, wherein the plurality of phase clock signals comprise first through N-th phase clock signals, wherein the different phase offsets of the first through N-th phase clock signals are about (360/N)I degrees, where N is an integers and I is an integer equal to or greater than 0 and equal to or less than N-1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Eva Yi Zheng whose telephone number is (571) 272-

3049. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number

for the organization where this application or proceeding is assigned is 703-879-9306.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

Eva Yi Zheng Examiner

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May 26, 2005

SHUWANG LIU

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